

AMENDMENTS TO THE CLAIMS

1. (Original) A nitride-based semiconductor element comprising: a substrate comprising a surface having projection portions;
a mask layer formed to be in contact with only said projection portions of said surface of said substrate;
a first nitride-based semiconductor layer formed on recess portions of said substrate and said mask layer; and
a nitride-based semiconductor element layer, formed on said first nitride-based semiconductor layer, having an element region.

2. (Original) The nitride-based semiconductor element according to claim 1, wherein said substrate includes a substrate selected from a group consisting of a sapphire substrate, a spinel substrate, an Si substrate, an SiC substrate, a GaN substrate, a GaAs substrate, a GaP substrate, an InP substrate, a ZrB₂ substrate and a quartz substrate.

3. (Original) The nitride-based semiconductor element according to claim 2, wherein said substrate includes a sapphire substrate, and said mask layer and said projection portions of said surface of said substrate are formed in the shape of stripes being parallel to the [1-100] direction of said sapphire substrate.

4. (Original) The nitride-based semiconductor element according to claim 2, wherein said substrate includes an Si substrate, and

said mask layer and said projection portions of said surface of said substrate are formed in the shape of stripes being parallel to the [1-10] direction of said Si substrate.

5. (Original) The nitride-based semiconductor element according to claim 1, further comprising a buffer layer formed on the interface between said recess portions of said substrate and said first nitride-based semiconductor layer.

Claims 6 – 9 (Cancelled).

10. (Original) A method of forming a nitride-based semiconductor comprising steps of:
forming projection portions on a surface on a substrate;
forming a mask layer to be in contact with only said projection portions of said surface of said substrate; and
growing a first nitride-based semiconductor layer on recess portions of said substrate and said mask layer through said mask layer.

11. (Original) The method of forming a nitride-based semiconductor according to claim 10, further comprising a step of forming a buffer layer on said recess portions of said substrate in advance of said step of growing said first nitride-based semiconductor layer.

12. (Original) The method of forming a nitride-based semiconductor according to claim 10, wherein

said steps of forming said projection portions on said surface on said substrate and forming said mask layer include a step of forming said mask layer on the surface of said substrate and thereafter etching the surface of said substrate through said mask layer thereby simultaneously forming said projection portions on said surface of said substrate and said mask layer coming into contact with only said projection portions of said surface.

13. (Original) The method of forming a nitride-based semiconductor according to claim 10, further comprising a step of growing a nitride-based semiconductor element layer having an element region on said first nitride-based semiconductor layer.

14. (Original) The method of forming a nitride-based semiconductor according to claim 10, wherein

said substrate includes a substrate selected from a group consisting of a sapphire substrate, a spinal substrate, an Si substrate, an SiC substrate, a GaN substrate, a GaAs substrate, a GaP substrate, an InP substrate, a ZrB₂ substrate and a quartz substrate.

15. (Original) The method of forming a nitride-based semiconductor according to claim 14, wherein

said substrate includes a sapphire substrate, and
said mask layer and said projection portions of said surface of said substrate are formed in the shape of stripes being parallel to the [1-100] direction of said sapphire substrate.

16. (Original) The method of forming a nitride-based semiconductor according to claim 14, wherein

said substrate includes an Si substrate, and

said mask layer and said projection portions of said surface of said substrate are formed in the shape of stripes being parallel to the [1-10] direction of said Si substrate.

Claims 17 – 22 (Cancelled).